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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,126	09/23/2003	James A. Medsker	JDM-031118	2878

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EXAMINER	
DINH, TIEN QUANG	
ART UNIT	**PAPER NUMBER**
3644	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/669,126	MEDSKER ET AL.	
	Examiner	Art Unit	
	Tien Dinh	3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/26/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Color photographs and color drawings are not accepted unless a petition filed under 37 CFR 1.84(a)(2) is granted. Any such petition must be accompanied by the appropriate fee set forth in 37 CFR 1.17(h), three sets of color drawings or color photographs, as appropriate, and, unless already present, an amendment to include the following language as the first paragraph of the brief description of the drawings section of the specification:

> The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Color photographs will be accepted if the conditions for accepting color drawings and black and white photographs have been satisfied. See 37 CFR 1.84(b)(2).

The informal drawings are not of sufficient quality to permit examination. Accordingly, replacement drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

Applicant is given a TWO MONTH time period to submit new drawings in compliance with 37 CFR 1.81. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Failure to timely submit replacement drawing sheets will result in ABANDONMENT of the application.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plates extending on either side of

the respective body mount must be shown, makeup of the opposing body mounts, and the cables or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in

the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The examiner does not understand what "sufficient strength to maintain rigidity and structural integrity without the use of metal support members" mean as cited in claim 1. How is it of sufficient strength? Is there a value assigned to this? Furthermore, how is it possible to have a plurality of the nose, opposing side panel, etc. to define a cavity? Are there multiple noses? The claim is poorly written.

In claim 3, the examiner fails to understand the working of the yaw control rail. Why is it called a yaw control rail? Does it control the yaw? If so, how does it control yaw? The drawings are poor in nature to allow one skilled in the art to understand the operation of the claimed element.

In claim 7, the examiner fails to understand what "the propeller positioned such that the propeller passes beyond a region proximate yaw control rail during a rotation thereof" mean or how it is accomplished?

The examiner fails to see how the torsional suspension component attaches to the trailing arms. The figures that were submitted were of such poor quality that one skilled in the art does not know what it does or how it is arranged with respect to the other parts of the landing gear. See claim 7.

The examiner fails to see how the chute attachment assembly works. Isn't the body mount just part of the opposing arms? According to figure 1, the body mounts 92 seem to be part of the arms 88 and 82. Furthermore, how is it possible for the plates to extend on either side of the respective body mount. How can it be possible for the plates to secure the body mount

between the plates? The drawings fail to show any details about this. This makes the invention difficult to understand. See claim 11.

How can the opposing arms be connected to each other within the cavity defined by the outer shell? See claim 12.

The examiner fails how cables can be used to secure the opposing body mounts. Please explain.

The examiner fails to see how body mounts can have a core and opposing fiber composite panels to encapsulate the core.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner does not understand how the nose, side panels, roll bar and powerplant self define a cavity that includes a cabin. The figures don't seem to show this.

In claim 7, the examiner fails to understand what "the propeller positioned such that the propeller passes beyond a region proximate yaw control rail during a rotation thereof" mean or how it is accomplished?

Claim 10 is dependent upon claim 10. This is clearly an error. The examiner will treat is as if it is dependent upon claim 9.

The noted list above is merely exemplary. The applicant is advised to review the whole application to make sure there are no other errors.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 8, 9, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder in view of Cox et al.

Snyder discloses a "powerchute" having an outer shell (which includes the nose, side panels, roll bar 42, powerplant shelf 64) and a cabin with a canopy 65. Snyder also show a chute attachment assembly having opposing arms mounted to opposing body mounts. The arms are connected to each other within a cavity defined by the outer shell. Synder is silent on inner reinforcements and the outer shell being made out of carbon fiber composite and the landing gear having a torsional suspension component with trailing arms, axles, and wheels. However, Cox et al teaches that a fuselage being made out of composite fibers are well known in the art. Cox et al also show a landing gear having torsional suspension component (shown as dashed line in figure 4) with trailing arms (where number 16 is pointed to), axles, and wheels. See figure 4. The examiner takes official notice that inner reinforcements are well known in this day and age.

It would have been obvious to one skilled in the art to have used inner reinforcements and make the inner reinforcements and outer shell out of carbon fiber in Snyder's system as taught by Cox et al to create a stronger and lighter aircraft.

Re claim 2, the examiner takes official notice that inner reinforcements are well known in this day and age and that it is obvious to one skilled in the art to have made the inner reinforcements out of composite fibers to give the aircraft strength at a reduced weight. Please also note that epoxy in this day is well know in the art to secure elements together.

Re claims 14-15, the examiner takes official notice that to make a structure out of fiber panels that encapsulate a core is well known in this day and age. Furthermore, to have a wood material as a core is also well known.

Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder as modified by Cox et al as applied to claim 1 above, and further in view of Spencer or Wheeler.

Snyder as modified by Cox et al discloses all claimed parts except for the yaw control rail. However, Spencer or Wheeler discloses that yaw control rails that are at the bottom of the fuselage are well known in the art.

It would have been obvious to one skilled in the art at the time the invention was made to have used yaw control rails at the bottom of Snyder's fuselage as taught by Spence or Wheeler to create a more stable and more controllable aircraft.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder as modified by Cox et al as applied to claim 1 above, and further in view of Spratt.

Snyder as modified by Cox et al discloses all claimed parts except for the trailing arms being tubular components. However, Spratt discloses that substantially uniformly tubular components that make up the trailing arms are of a landing gear is well known.

It would have been obvious to one skilled in the art at the time the invention was made to have used/made the trailing arms/landing gear system of Snyder as modified by Cox and taught by Spratt substantially uniformly tubular to allow greater strength.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Asseline et al, Bragg, Snyder, Alan, and Schairer disclose aircraft means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 571-272-6899. The examiner can normally be reached on 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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